

## 【ABSTRACT】

Disclosed herein is a form panel system that is capable of constructing a frame structure including a wall of a concrete-based building and a concrete structure including various retaining walls for civil-engineering works. The form panel system comprises compression cement boards disposed opposite to each other while being spaced a predetermined distance from each other, the compression cement boards being reinforced with fiber materials, reinforcing boards obtained by forming the compression cement boards in predetermined shapes, or foamed plastic heat insulating panels, and metal plate studs disposed between the compression cement boards. The metal plate studs are composed of metal plates having predetermined thicknesses and distances therebetween, which are selected depending on the durability of concrete. Each of the metal plate studs has at least one opening formed therein. Each of the metal plate studs is provided at both opposite side ends thereof with bent parts. The metal plate stud is fixed to the respective compression cement boards by means of fixing pieces, and concrete is injected and cured into the space between the compression cement boards, to which the metal plate studs are fixed and the foamed plastic heat insulating panels are attached. According to the present invention, the fiber-reinforced compression cement boards, the foamed plastic heat insulating panels, the metal plate studs having the openings are vertically or horizontally arranged without limits.